

# **Service Regulator Requirements Residential and Small Commercial**

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GS 6500.105(IN)
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Companies Affected	•
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✓ NIPSCO	□ cgv	☐ CMD
	☐ CKY	□ СОН
	☐ CMA	☐ CPA

**REFERENCE** 49 CFR Part 192.353, 192.355, 192.357

### 1. GENERAL

The purpose of this standard is to provide requirements for the inspection or installation of residential and small commercial regulators installed on piping systems with operating pressures greater than low pressure (>LP) to a maximum allowable operating pressure (MAOP) of 100 psig. All service regulators showing external corrosion or damage shall be replaced.

These requirements apply to the initial installation and any subsequent re-design or relocation requested by the customer. Any relocation of a gas meter necessary to meet this installation requirement shall be charged to the customer per the guidelines in gas standard 160-0032.

Note: Mercury regulators and/or external mercury relief devices encountered in the field shall be removed as soon as practical. Upon discovery and prior to removal of a mercury regulator and/or external mercury relief device, a member of the Operations Center leadership team and a member of the Environmental Department shall be notified. Inspect the area beneath the regulator and/or relief device for evidence of a previous mercury spill and take precautions to ensure that any mercury is not disturbed or tracked through the building. Never attempt to remove a mercury regulator and/or external mercury relief device without assistance and guidance from a member of the Operations Center Leadership team and a member of the Environmental Department.

#### 2. LOCATION

Gas meters and service regulators shall be located per the drawing in Exhibits A and B and at a location that is accessible for reading, inspection, servicing and operation of the shut-off valve. Additionally, residential, electric and gas meters should both be located on the same side of the building within the front 1/3 and if possible within 10 feet from the front corner to aid meter reading, testing, maintenance and to allow quick access for emergency response. If possible, locate the meter riser to avoid the need to cross over an existing underground electric line when the service line is installed from the main.

When more than one meter is being set on premises (a tract of land and its buildings) they shall be connected to the same service line and installed at one location, except where

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impractical.

Service regulators are to be located where gas from the vent can escape freely into the atmosphere and away from any opening(s) into a building.

#### 3. SERVICE REGULATOR REQUIREMENTS

The Company's standard billing and delivery pressure is 6.5 inches water column (6.5" w.c.).

Consideration should be given as to the location of the service regulator and/or relief device to avoid sources of ignition and the possibility of vent terminal freeze-ups. Regulator vent skirts or a vent line extending the vent terminal away from the potential source of moisture should be considered if the potential for vent terminal blockage due to freeze-up is evident.

### 3.1 Service Regulator Vent Requirements

The regulator and/or relief device vent; vent line, if so equipped; screen; and cap, if present; shall be properly sized, installed, and free of blockage, restrictions or valves, with no external leakage.

### 3.1.1 Aboveground Vent Lines

When a regulator and/or relief device is located inside a building, each regulator and/or relief device shall have a separate metallic relief vent line vented to the outdoors so in the event gas is discharged, it will not create a hazard- under no circumstances shall the relief vent lines of separate regulators and/or relief devices be manifolded.

If tubing is used for the relief vent line, it shall be metallic and one size larger than the relief opening – in no case shall corrugated tubing be used as a regulator relief vent line.

Relief vent lines shall be as short as possible, and when in excess of 10 feet in length or contain more than two (2) elbows, shall be increased one nominal pipe size for each additional 10 feet of length. Each elbow in the vent line will contribute approximately three (3) feet in effective length, including the termination elbow.

Service regulators installed outdoors of a building requiring a relief vent line, may be equipped with a PVC vent line conforming to UL 651, schedule 40 or schedule 80 rigid PVC conduit. Under no circumstances shall the relief vent line be combined with another regulator relief vent line. The same sizing guidance provided above applies.

### 3.1.2 Belowground Vent Lines

That portion of the regulator vent line that is exposed shall be installed in



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accordance with the requirements set forth in section 3.1.1 of this standard - under no circumstances shall the relief vent lines of separate regulators and/or relief devices be manifolded.

When no other alternatives exist and it becomes necessary to install a portion of the regulator vent line underground, that portion of the belowground vent line shall be constructed of steel pipe in accordance with the requirements in 3020 series of the Gas Standards and protected against corrosion in reference to the 1400 series of the Gas Standards, or polyethylene pipe installed in accordance with the 3020 series of the Gas Standards.

Relief vent lines shall be as short as possible, and when in excess of 10 feet in length or contain more than 2 elbows (including the termination elbow), shall be increased one nominal pipe size for each additional 10 feet of length. Each elbow in the vent line will contribute approximately three (3) feet in effective length. All elbows and fittings shall be welded by a qualified welder in accordance with the applicable company Welding Manual.

## 3.1.3 Service Regulator Vent Terminal Requirements

**Note:** All measurements shall be taken from the service regulator vent terminal (relief opening) (see Exhibits A and B).

### Except as noted below, the vent terminal:

- Shall be installed outdoors above grade, at a minimum height of 12 inches.
- In areas where flooding may occur, a minimum height in excess of 12 inches may be required to prevent the entry of water into the vent terminal.
- c. Shall be installed to protect it from the entry of insects by a screen or an approved vent cap, and be installed so as to prevent the entry of rainwater.
- d. Shall be located not less than three (3) feet radially and not directly below any rotating electrical equipment (e.g., an air conditioning unit).
- e. Should be installed with a minimum of three (3) feet radial separation from an electric meter, electric panel, electric outlet, electric pedestal, electrical equipment disconnect, or pad mounted transformer, etc. When it is not possible to install the regulator vent terminal with a three (3) foot radial separation, a minimum of one (1) foot radial separation shall be maintained between the regulator vent terminal and any of the electric equipment listed above.
- f. Shall be located three (3) feet radially from, and not below, any first



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floor opening into a building, such as a door, window(s) (that can be opened) or other gravity air opening(s) into a building (including clothes dryer exhaust terminals, and appliance air intakes).

g. Shall be located not less than 10 feet radially from, and not below any forced air inlet into a building (excluding appliance air intakes).

**Note:** It may be acceptable for reduced clearances from building openings and potential sources of ignition when approved self-operated diaphragm service regulators equipped with over pressure protection and vent limiting devices are installed.

#### 4. ESTABLISH/REESTABLISH SERVICE

Refer to the procedures in the Customer Service Handbook for establishing/reestablishing service.

### 5. RECORDS

Record the necessary information on the MDT Order, including pertinent information regarding the service regulator(s).



N/A

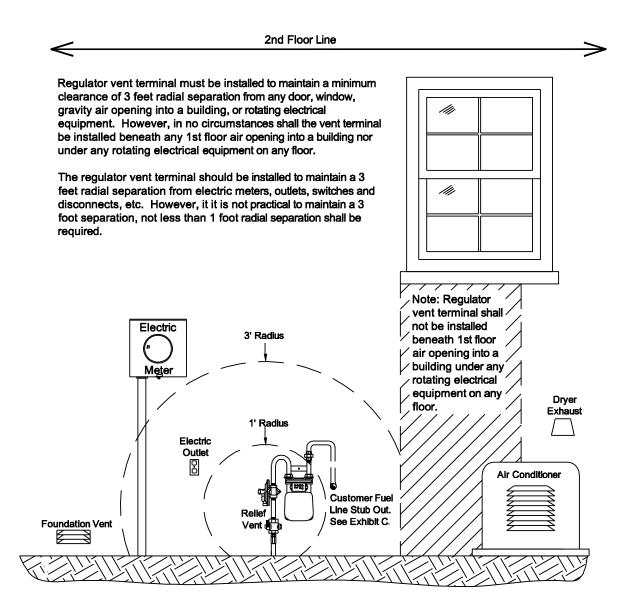
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## **EXHIBIT A**





N/A

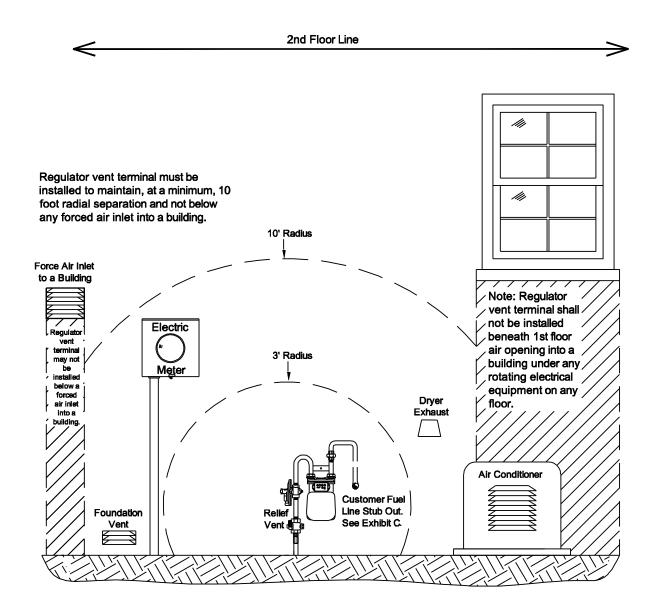
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### **EXHIBIT B**





N/A

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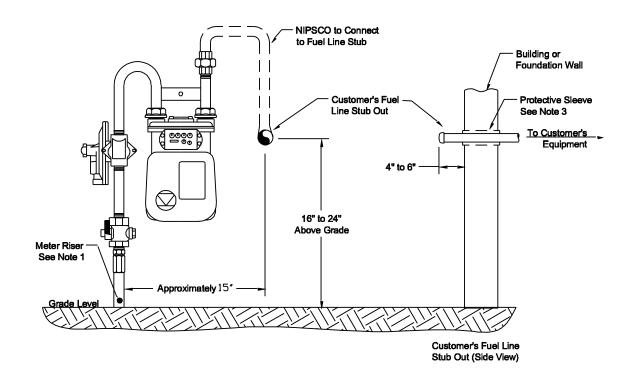
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### **EXHIBIT C**

### Details of Customer Supplied Fuel Line Stub Out



- Note 1: NIPSCO will place a stake at this location near the building wall to indicate where the meter riser will be installed. It is the customer's responsibility to have their fuel line stubbed out 15 inches to the right of the stake and 16 to 24 inches above the grade level.
- Note 2: Customer is responsible for protecting the exterior portion of the fuel line from corrosion by applying a protective coating or wrap.
- Note 3: When fuel line extends outside through concrete or masonry wall the customer is responsible for encasing it in a protective sleeve and to seal the annular space between the gas pipe and sleeve.